



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,677	11/07/2000	Alberto A. Lopez		9705

7590 07/02/2003

Edwin A. Suominen
LOUIS J. HOFFMAN, P.C.
14614 North Kierland Boulevard, Suite 300
Scottsdale, AZ 85254

EXAMINER


PRASAD, CHANDRIKA

ART UNIT	PAPER NUMBER
----------	--------------

2839

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/707,677	LOPEZ, ALBERTO A. 	
	Examiner	Art Unit	
	Chandrika Prasad	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The reply filed on 07/31/02 consists of amendments to claims 9, 17, 24, 26, 30, addition of new claim 32, changes in the drawings and specification and remarks related to rejection of claims. The claims are not allowable as explained below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 8, 10-12, 14, 16 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Henry.

Henry (Figures 1-10) shows a packaging shell (rack) 54 containing a plurality of electrical distribution blocks 10, each block having a plurality of parallel conductive paths (traces) 32, 34, 35, each having two opposite ends and a plurality of connectors 14, 16 connected at one end and a plurality of connectors 18, 20, 22 connected at the other end wherein the connectors 14, 16 at one end are different than those at the other end and are coupled by a switch 52. Each end of the conductive path is connected to only one connector, and there are 5 connectors (14, 16, 18, 20, 22), which are more than the number of conductive paths (i.e., 3). It is inherent that each connector has a mating interface.

4. Claims 18-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang.

Yang (Figures 1-7) shows a non-conductive fuse block 10 for an automobile with an array of fuse receptacles 28, 30 arranged in rows and columns for receiving fuses 24, 26

Art Unit: 2839

having terminals (blades) 34, 36 connected to a busbar 16 having parallel conductors 52 with terminals 54 received in the receptacles connecting the first and second terminals of the fuses and the terminals 52, 54 are interconnected to conductors 52. An electrical current is passed through the fuses by means of a conductor connected to a power cable 20 wherein the conductor connected to the cable is oriented perpendicular to the fuses.

Claim Rejections - 35 USC § 10

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 7, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry in view of Hughes.

Henry shows all the features of these claims as described in Paragraph 3 above except the connectors on one side having a plurality of interfaces, and a cable with non-circular cross section. Connectors having a single or multiple interfaces and circular or non-circular cables are well known in the art of electrical connectors. Hughes (Figures 1-10) shows a connector system with connectors in housing tiers 218, 219 at one end having an interconnected multiple interfaces, and a non-circular cable 121 at the other end. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to use a multiple interface connectors instead of two separate connectors because this would provide a more compact connector.

The instant invention does not provide any reasons or problems to be solved by having a non-circular cross-section. It would have been obvious to one having ordinary skill

Art Unit: 2839

in the art at the time of the instant invention to use a non-circular cable because this would provide a thinner appearance as compared to circular cable having the same cross-sectional area as shown by Hughes.

7. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry in view of Yang.

Henry shows all the features of these claims as described in Paragraph 3 above except the use of fuses. The use of fuses is common knowledge and fuses arranged in rows and columns are routinely used in most circuit breakers in households as well as in automobiles. Yang (Figure 1) shows an array of fuses arranged in rows and columns. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to use fuses between the conduction paths because this would protect the electrical devices connected to the distribution system.

8. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tarver.

Tarver (Figures 1-6) shows an electrical connector having a first portion 23 of conductive material with a circular hole to receive a multi-strand coaxial cable bundle 22, and a second portion 21 made of metal or plastic (column 2, lines 70-75) with a rectangular hole receiving an insulated cable 20 wherein the two holes are coaxial.

But Tarver does not specify the size of the rectangular hole being larger than that of the circular hole. The instant invention does not provide any reasons or problems to be solved by having size of the rectangular hole being larger than that of the circular hole. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to make size of the rectangular hole being larger than that of the circular hole

Art Unit: 2839

because such a modification would require a mere change in size, which would involve only routine skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Response to Arguments

9. Applicant's arguments with respect to claims 2, 6, 10, 14, and 30-32 have been considered but are not persuasive.

Each end of conduction path 35 in Henry (Figure 2) can be connected to no more than one connector as shown for conduction path 32, 34. It is obvious that a connector has a mating interface. Henry shows a packaging shell 54. Tarver (column 2, lines 70-75) discloses that the covers 24, 26, which are part of the portions 21, 23 can be metallic or plastic.

10. Applicant's arguments with respect to claims 18-29 and 9 and 17 have been considered but are moot in view of the new ground(s) of rejection. Yang shows a plurality of fuses interconnected in parallel.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad at (703) 308-0977. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at (703) 308-2710. The fax number for this Group is (703) 872-9318 (general) and (703) 872-9319 for after-final. Any inquiry of a general nature should be directed to the Group receptionist at (703) 308-1782.



Chandrika Prasad

October 17, 2002